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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,784	10/27/2003	John W. Still	56.0708	2783

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EXAMINER

BUTTNER, DAVID J

ART UNIT PAPER NUMBER

1712

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

in

Office Action Summary	Application No. 10/605,784	Applicant(s) STILL ET AL.	
	Examiner David Buttner	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 11, 14-18, 20, 24 is/are rejected.
- 7) ☒ Claim(s) 5-9, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The concentration of claim 1 is not supported by the parent provisional. The effective filing date for claims 1-18 and 20 is 10/27/03.

Claims 1-4,11,14,16-18,20 and 24 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cooke 2003/0060374.

Cooke suggests hydraulic fracturing of wells by injecting a degradable polymer (abstract). The degradable polymer is preferably polylactide (claim 13). Cooke does not explicitly teach concentrations of the polylactide. However, Cooke does state the fractional volume of polymer should be low enough that the polymer is not the continuous phase (paragraph 29). Later, Cooke states the polymer becomes the continuous phase at 50 volume % (paragraph 29). Therefore it is inferred that the initial fracturing fluid has less than 50% polylactide by volume. Based on the known density of polylactide ($\sim 1.2\text{g/ml}$ col 30 line 26 of Ryan '873), this converts to less than 0.6kg/L .

Additionally, differences in concentrations will not support the patentability of subject matter encompassed by the prior art without a showing of criticality (MPEP 2144.05 II). Routine experimentation would uncover the optimum concentration of polymer in the fracturing fluid.

Claims 1-4,11,14,16-18,20 and 24 rejected under 35 U.S.C. 102(a,e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over provisional application 60-325071.

The provisional application is relied on by 2003/0060374 for priority. The provisional application became available for public viewing at least as early as 3/27/03 (the publication date of 2003/0060374).

The provisional application corresponds to the previously described 2003/0060374 and additionally states the volume of the degradable polymer is 2-50% (paragraph 13). Based on the known density of polylactide (~1.2g/ml col 30 line 26 of Ryan '873), this converts to 0.02 - 0.6kg/L.

Claim 24 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Erbstoesser '964.

Erbstoesser (abstract) suggests the use of degradable polymers in wellbore compositions. The polymer is preferably polylactide (col 3 line 15). The composition can used in fracturing treatments (col 6 line 46).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3,10,14,15,17,20 and 24 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10-941384. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims using polylactic acid for fracturing subterranean formations (eg claim 3). It is clear from the application's examples that concentrations within the instant ranges are intended.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3,10,14,15,17,20 and 24 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10-941384. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims using polylactic acid for fracturing subterranean formations (eg claims 2,19). It is clear from the application's description (paragraph 39) that concentrations within the instant ranges are intended.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 5-9,12 and 13 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited art does not clearly teach the combination of the high concentration of solid acid precursor and other ingredients in a fracturing process.

Applicant's arguments filed 3/8/06 have been fully considered but they are not persuasive.

The previous rejections are replaced with the closer art.

Note that only timely filed terminal disclaimers overcome double patenting rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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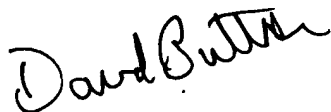
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

DAVID J. BUTTNER
PRIMARY EXAMINER

4/6/06

A handwritten signature in black ink that reads "David Buttner". The signature is written in a cursive style with a large, looped "D" and a stylized "B".